

Docket No. AB-131U1

Amendments to and Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3 (canceled)

Claim 4 (previously presented) An active electrode array comprising:

at least four banks of active electrodes;

wherein each bank of active electrodes includes a plurality of active electrodes;

wherein each active electrode comprises a plurality of individual electrode contacts and an active switch integrally formed with the individual electrode contacts for individually activating the plurality of individual electrode contacts with a selected electrode stimulation current in response to electrode control signals;

wherein the plurality of individual electrodes included within each active electrode comprises at least one lateral electrode contact and at least one medial electrode contact;

wherein each active electrode includes a silicon die and switching circuitry hermetically sealed on the silicon die and operatively connected to the lateral and medial electrode contacts, wherein the switching circuitry responds to the electrode control signals to selectively activate one or both of the medial or lateral electrode contacts; and

wherein all in combination with each bank of the active electrodes comprises a stack of the silicon dies of each active electrode belonging to that bank, over-molded with silastic.

Claim 5-7 (canceled)

Claim 8 (previously presented) An active electrode array comprising:

a plurality of active electrodes;

wherein each active electrode includes switching circuitry built into the electrode array and a plurality of individual electrode contacts that may be individually activated by electrode control signals applied to the switching circuitry, all in combination with the switching circuitry of each active electrode comprising;

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